## **RAW SEQUENCE LISTING**

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number:	10/564,302
Source:	IFWP
Date Processed by STIC:	1-20-06

## ENTERED



IFWP

RAW SEQUENCE LISTING DATE: 01/20/2006
PATENT APPLICATION: US/10/564,302 TIME: 12:08:30

Input Set : A:\toya108-10 seq lst US.TXT
Output Set: N:\CRF4\01202006\J564302.raw

```
3 <110> APPLICANT: Hatake, Kiyohiko
      4
              Terui, Yasuhito
      5
             Mishima, Yuji
      6
              Yamada, Akio
              Sakurai, Takuma
     8
              Itoh, Takehito
     10 <120> TITLE OF INVENTION: Drug for Cancer Therapy
     12 <130> FILE REFERENCE: TOYA108.010APC
C--> 14 <140> CURRENT APPLICATION NUMBER: US/10/564,302
C--> 14 <141> CURRENT FILING DATE: 2006-01-10
     14 <150> PRIOR APPLICATION NUMBER: PCT/JP2005/004123
     15 <151> PRIOR FILING DATE: 2005-03-09
    17 <150> PRIOR APPLICATION NUMBER: JP2004-80454
     18 <151> PRIOR FILING DATE: 2004-03-19
     20 <160> NUMBER OF SEQ ID NOS: 3
     22 <170> SOFTWARE: PatentIn Ver. 3.1
     24 <210> SEQ ID NO: 1
     25 <211> LENGTH: 708
     26 <212> TYPE: PRT
     27 <213> ORGANISM: Bos taurus
     29 <220> FEATURE:
     30 <221> NAME/KEY: sig peptide
     31 <222> LOCATION: (1)...(19)
     32 <223> OTHER INFORMATION: Lactoferrin
     34 <400> SEQUENCE: 1
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     39 Pro Glu Trp Phe Lys Cys Arg Arg Trp Gln Trp Arg Met Lys Lys Leu
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     41 Gly Ala Pro Ser Ile Thr Cys Val Arg Arg Ala Phe Ala Leu Glu Cys
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     43 Ile Arq Ala Ile Ala Glu Lys Lys Ala Asp Ala Val Thr Leu Asp Gly
     45 Gly Met Val Phe Glu Ala Gly Arg Asp Pro Tyr Lys Leu Arg Pro Val
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                    100
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     51 Gln Gly Arg Lys Ser Cys His Thr Gly Leu Gly Arg Ser Ala Gly Trp
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55	Leu	Glu	Pro	Leu	Gln	Gly	Ala	Val	Ala	Lys	Phe	Phe	Ser	Ala	Ser	Cys
56					165					170					175	
57	Val	Pro	Cys	Ile	Asp	Arg	Gln	Ala	Tyr	Pro	Asn	Leu	Cys	Gln	Leu	Cys
58				180					185					190		
59	Lys	Gly	Glu	Gly	Glu	Asn	Gln	Cys	Ala	Cys	Ser	Ser	Arg	Glu	Pro	Tyr
60	_	_	195	_				200					205			
61	Phe	Gly	Tyr	Ser	Gly	Ala	Phe	Lys	Cys	Leu	Gln	Asp	Gly	Ala	Gly	Asp
62		210	•		-		215	•	•			220	-		_	_
63	Val	Ala	Phe	Val	Lys	Glu	Thr	Thr	Val	Phe	Glu	Asn	Leu	Pro	Glu	Lys
	225				4	230					235					240
		Asp	Ara	Asp	Gln		Glu	Leu	Leu	Cvs		Asn	Asn	Ser	Arq	Ala
66			5	<u>F</u>	245	- 2 -				250					255	
	Pro	Val	Asp	Δla	Phe	Lvs	Glu	Cvs	His		Ala	Gln	Val	Pro	Ser	His
68			T.O.P	260		-1-		-1-	265					270		
	Δla	Val	Val		Arg	Ser	Val	Asp		Lvs	Glu	Asp	Leu		Trp	Lvs
70			275		9			280	1			<u>F</u>	285			
	T.e.11	Ĩ. <b>-</b> 11		Lvc	Ala	Gl n	Glu		Phe	Glv	Lvs	Asn		Ser	Ara	Ser
72	шси	290	501	_,,	****	<b>U</b>	295	_,.		017	-70	300	-10		9	-00
	Dhe		T.e.11	Dhe	Gly	Ser		Pro	Glv	Gln	Ara		T.e.11	T.e.11	Phe	Lvs
	305	GIII	пси		OLY	310	110	110	O <sub>1</sub>	0111	315	1155				320
		Sar	Δla	T.011	Gly		T.211	Δτα	Tla	Dro		1376	Val	Δsn	Ser	
76	vob	SCI	AIA	пец	325	rne	шец	nr 9	110	330	DCI	цуз	vai	nsp	335	2114
	T OU	Ф	Lou	Glar	Ser	λνα	Tran	T.011	Thr		T.011	T.370	λen	T.611		Glu
.78	Leu	ıyı	ьец	340	ser	ALG	ıyı	neu	345	1111	пеп	цуъ	ASII	350	Arg	Giu
	Πp~	77-	C1,,	-	Val	Tvc	717	71 ***		Thr	7~~	t/al	Tal.		Cvc	77.5
	TIIL	AIA	355	Giu	vai	цуѕ	Ala	360	ıyı	1111	Arg	vai	365	пр	Cys	AIa
80	1707	<b>~1</b>		~1	~1	<b>01</b> 5	Tara		Crrc	C1 n	C1 n	Trn		Cln	Cln	Sor
	vai	_	PIO	GIU	Glu	GIII	_	гуу	Cys	GIII	GIII	380	ser	GIII	GIII	Ser
82	<b>a</b> 3	370	7	77-7	Mla an	O	375	mb so	77.	C	mh w		7 an	7	Crra	T10
	_	GIII	ASII	val	Thr	_	Ald	IIII	Ald	ser		1111	Asp	Asp	Cys	400
	385	T	777	T	T	390	<b>a</b> 1	77.	7 ~~	77.	395	7	T 011	7	~1··	
	vai	Leu	vaı	ьeu	Lys	GIY	GIU	Ala	Asp		ьеи	ASII	ьeu	Asp		GIA
86	m	<b>77</b> -	·	<b>m</b> l	405	<b>01</b>	<b>T</b>	<b>~</b>	a1	410	777	D	17-7	T	415	a1
	ıyr	тте	Tyr		Ala	GIY	ьys	Cys		ьeu	vai	PIO	vai		Ala	GIU
88		_	_	420	_	_		<b>a</b>	425	<b>-</b>	•	<b>G</b>	**- 7	430	3	D
	Asn	Arg	_	ser	Ser	ьуs	His		ser	ьeu	Asp	Cys		Leu	Arg	Pro
90	_,		435	_	_			440					445		~1	<b>~</b> 1
	Thr		GIY	Tyr	Leu	Ala		Ата	vaı	vai	ьуs	_	Ala	Asn	GIU	GIY
92		450					455	_	_			460	•			=
		Thr	Trp	Asn	Ser		Lys	Asp	Lys	Lys			His	Thr	Ala	
	465					470					475	•		_		480
	Asp	Arg	Thr	Ala	Gly	Trp	Asn	Ile	Pro		Gly	Leu	Ile	Val		Gln
96					485					490					495	
97	Thr	Gly	Ser	Cys	Ala	Phe	Asp	Glu	Phe	Phe	Ser	Gln	Ser	Cys	Ala	Pro
98				500					505					510		
99	Gly	Ala	Asp	Pro	Lys	Ser	Arg	Leu	Cys	Ala	Leu	Cys	Ala	Gly	Asp	Asp
100 515 520 525																
10	l Glı	n Gly	y Lei	u Asj	р Гу	з Су	s Va	l Pro	o Ası	n Se	r Ly	s Gl	ı Ly:	з Ту:	r Ty	r Gly

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105	Phe	Val	Lys	Asn	Asp	Thr	Val	Trp	Glu	Asn	Thr	Asn	Gly	Glu	Ser	Thr
106					565					570					575	
107	Ala	Asp	Trp	Ala	Lys	Asn	Leu	Asn	Arg	Glu	Asp	Phe	Arg	Leu	Leu	Cys
108				580					585					590.		
109	Leu	Asp	Gly	Thr	Arg	Lys	Pro	Val	Thr	Glu	Ala	Gln	Ser	Cys	His	Leu
110			595					600					605			
111	Ala	Val	Ala	Pro	Asn	His	Ala	Val	Val	Ser	Arg	Ser	Asp	Arg	Ala	Ala
112		610					615					620				
113	His	Val	Lys	Gln	Val	Leu	Leu	His	Gln	Gln	Ala	Leu	Phe	Gly	Lys	Asn
	625					630					635					640
	Gly	Lys	Asn	Cys	Pro	Asp	Lys	Phe	Cys	Leu	Phe	Lys	Ser	Glu	Thr	Lys
116					645					650					655	
	Asn	Leu	Leu		Asn	Asp	Asn	Thr		Cys	Leu	Ala	Lys	Leu	Gly	Gly
118				660					665				_	670	_	_
	Arg	Pro		Tyr	Glu	Glu	Tyr		Gly	Thr	Glu	Tyr		Thr	Ala	Ile
120	_		675					680	_	_	_	_	685		_	_ <b>_</b> .
	Ala		Leu	Lys	Lys	Cys		Thr	Ser	Pro	Leu		Glu	Ala	Cys	Ala
122	D1	690	m\	7			695					700				
		Leu	Tnr	Arg												
	705	٥. ٥	70 TI	NIO.	. 1									•		
				NO:												
		2> T			,											
				ISM:	Bog	tauı	riie									
				NCE:		cuu	Lub									
						Trp	Gln	Trp	Ara	Met	Lvs	Lvs	Leu	Gly	Ala	Pro
133		,-2-	-1-	5	5				5	10	-1-	-2-		2	15	
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DATE: 01/20/2006 VERIFICATION SUMMARY TIME: 12:08:31 PATENT APPLICATION: US/10/564,302

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L:14 M:270 C: Current Application Number differs, Replaced Current Application No L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date